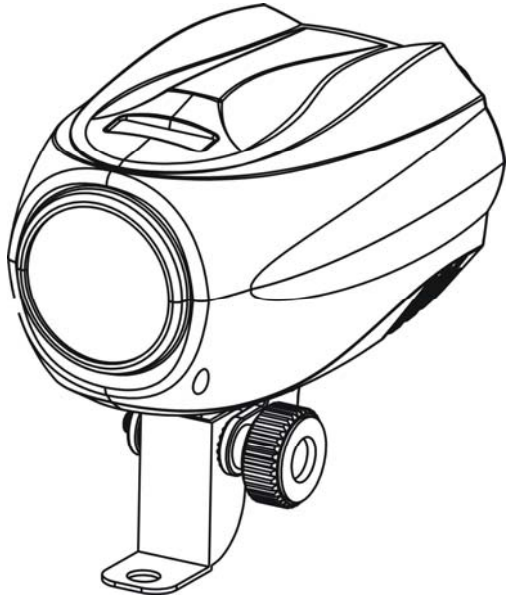
# LED-707

DMX512

LINKABLE
STAND ALONE

Marvelous Sound Activation



# User Manual

Please read the instructions carefully before use

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# 1. Safety Introductions

**WARNING**

**Please read the instructions carefully which includes important information about the installation, operation and maintenance.**

- Please keep this User Manual for future consultation. If you sell the fixture to another user, be sure that they also receive this instruction booklet.
- Unpack and check carefully there is no transportation damage before using the fixture.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the fixture.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Disconnect main power before servicing and maintenance.
- Use safety chain when fixes this fixture. Don't handle the fixture by taking its head only, but always by taking its base.
- Maximum ambient temperature is Ta：40℃. Don't operate it where the temperature is higher than this.
- In the event of serious operating problem, stop using the fixture immediately. Never try to repair the fixture by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- Do not connect the device to any dimmer pack.
- Do not touch any wire during operation and there might be a hazard of electric shock.
- To prevent or reduce the risk of electrical shock or fire, do not expose the fixture to rain or moisture.
- The housing must be replaced if they are visibly damaged.
- Do not look directly at the LED light beam while the fixture is on.
- There are no user serviceable parts inside the fixture. Do not open the housing or attempt any repairs by yourself. In the unlikely event your fixture may require service, please contact your nearest dealer.



# 2. Technical Specifications

∞ **Power supply**

Input Voltage： AC 100V-240V 50-60Hz

∞ **4 Channels**

Channel 1 = Mode

Channel 2 = Pattern/Chase

Channel 3 = Pattern Strobe/Chase Speed

Channel 4 = Dimmer

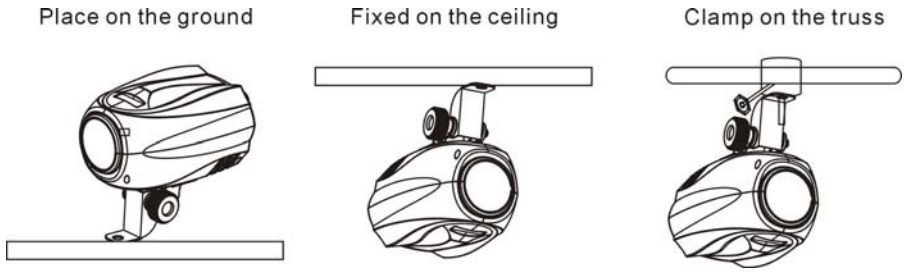
- It can be operated by DMX512 control or can be used as an individual unit without controller.
- It can be linked together as many as required in master/slave mode, and perform the great built-in programmed lighting shows triggered by music.
- Please use a 3 pin XLR cable/plug when connecting them together.
- It features different pre-programmed chase patterns.
- Fan cooled.

∞ **Dimension：** 194 x 202 x 141 mm

∞ **Weight：** 1KG

# 3. Installation

You can install the unit on the truss or ceiling, Use clamps to fix the unit to truss. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Always ensure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 kg for each unit.



## 4. How To Control The Unit

You can operate the unit in three ways:

1. By master/slave built-in preprogram function
2. By easy controller
3. By iLead controller (Please refer to the user guide of iLead) or universal DMX controller

No need to turn the unit off when you change the DMX address, as new DMX address setting will be effected at once. Every time you turn the unit on, it will show 200S on the display and move all the motors to their 'home' position and you may hear some noises for about 20 seconds. After that the unit will be ready to receive DMX signal or run the built in programs.

## 4.1 Master/Slave Built In Preprogrammed Function

By linking the units in master/slave connection, the first unit will control the other units to give an automatic, sound activated, synchronized light show. This function is good when you want an instant show. You have to set the first unit in master mode SHMd and select Sh 1 (show 1) or Sh 2 (show 2) or Sh 3 (show 3) or Sh 4 (show 4) mode. Its DMX input jack will have nothing plugged into it, and Its master LED will be constantly on and sound LED will flash to the music. The other units will have to set in slave mode SLAd and select SL 1 (normal) or SL 2 (2 light show) mode, Their DMX cables plugged into the DMX input jacks (daisy chain) and the slave led lights will constantly on.

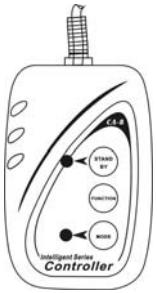
**2-light show**

In SLAd (slave mode), SL 1 means the unit works normally and SL 2 means 2-light show. In order to create a great light show, you can set SL 2 on the second unit to get contrast movement to each other, even if you have two units only.

## 4.2. Easy Controller (by CA-8)

The easy remote control is used only in master/slave mode. There is a terminator for connect the easy controller inside the fixture. By connecting the cable into DMX IN waterproof cable entry gland to the CA-8 terminator of the first fixture, you will find that the remote control on the first fixture will control all the other fixtures for Stand by, Function and Mode functions.

| | | |
|---|---|---|
| Blackout | Blackout the unit | |
| Function | 1. Synchronous Strobe<br>2. Sound Strobe<br>3. Two light Strobe | Chase Select<br>(Chase 1-10) |
| Mode | Sound/Strobe<br>(LED OFF) | Chase<br>(LED ON) |






## 4.3 iSolution Operation

- Consistent DMX configuration enable iMove to be linked together with iRock and iShow and controlled at the same time.
- DMX address can be set remotely by iLead controller (Please refer to the user manual of iLead controller). No need to calculate the DMX channels of each fixture in the chain.
- Automatic switching between DMX function and built-in stand alone programs.

## 4.4 DMX Controller

An universal DMX controller to control the units, you have to set DMX address from 1 to 512 channel so that the units can receive DMX signal.

Press the **MENU** button up to when the Addr is showing on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the DMX512 address. Once the address has been selected, press and keep **ENTER** button pressed up to when the display stops blinking or storing automatically 8 seconds later. To go back to the functions without any change press the **MENU** button again. If you use please refer to the following diagram to address your DMX512 channel for the first 4 units.

DMX address can be setting remotely by IL-0824 controller. No need to calculate the DMX channels of each fixture in the chain.

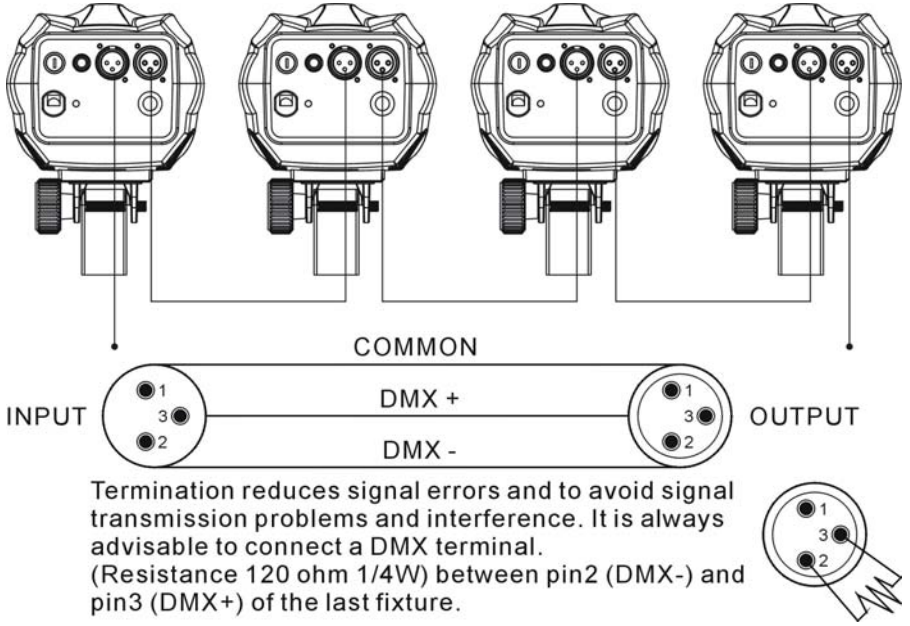
## 5. DMX512 Configuration

| DMX512 Configuration | | | | | |
|---|---|---|---|---|---|
| Ch1 | Ch2 | | Ch3 | | Ch4 |
| Mode | Pattern | Chase | Pattern Strobe | Chase Speed | Dimmer |
| 240-255 Stand-alone | 250-255 Pattern 25 | 250-255 Chase 25 | 10-255 Fast Strobe | 255 Fast Speed | 255 100% |
| | 240-249 Pattern 24 | 240-249 Chase 24 | | | |
| | 230-239 Pattern 23 | 230-239 Chase 23 | | | |
| | 220-229 Pattern 22 | 220-229 Chase 22 | | | |
| | 210-219 Pattern 21 | 210-219 Chase 21 | | | |
| | 200-209 Pattern 20 | 200-209 Chase 20 | | | |
| | 190-199 Pattern 19 | 190-199 Chase 19 | | | |
| | 180-189 Pattern 18 | 180-189 Chase 18 | | | |
| | 170-179 Pattern 17 | 170-179 Chase 17 | | | |
| | 160-169 Pattern 16 | 160-169 Chase 16 | | | |
| | 150-159 Pattern 15 | 150-159 Chase 15 | | | |
| 120-239 Chase | 140-149 Pattern 14 | 140-149 Chase 14 | | | |
| | 130-139 Pattern 13 | 130-139 Chase 13 | | | |
| | 120-129 Pattern 12 | 120-129 Chase 12 | | | |
| | 110-119 Pattern 11 | 110-119 Chase 11 | | | |
| | 100-109 Pattern 10 | 100-109 Chase 10 | | | |
| | 090-099 Pattern 09 | 090-099 Chase 09 | | | |
| | 080-089 Pattern 08 | 080-089 Chase 08 | | | |
| | 070-079 Pattern 07 | 070-079 Chase 07 | | | |
| | 060-069 Pattern 06 | 060-069 Chase 06 | | | |
| | 050-059 Pattern 05 | 050-059 Chase 05 | | | |
| | 040-049 Pattern 04 | 040-049 Chase 04 | | | |
| 0-119 Pattern | 030-039 Pattern 03 | 030-039 Chase 03 | | | |
| | 020-029 Pattern 02 | 020-029 Chase 02 | | | |
| | 010-019 Pattern 01 | 010-019 Chase 01 | 0-9 Blackout | 0 Slow Speed | 0 0% |
| | 000-009 Blackout | 000-009 Blackout | | | |



## 6. DMX512 Connections

The DMX512 is widely used in intelligent lighting control, with a maximum of 512 channels.


COMMON
INPUT
DMX +
DMX -
OUTPUT
1
3
2
Termination reduces signal errors and to avoid signal transmission problems and interference. It is always advisable to connect a DMX terminal.
(Resistance 120 ohm 1/4W) between pin2 (DMX-) and pin3 (DMX+) of the last fixture.

1. Connect the fixture together in a “daisy chain” by XLR plug cable from the output of the fixture to the input of the next fixture. The cable cannot be branched or split to a “Y” cable. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system
2. The DMX output and input connectors are pass-through to maintain the DMX circuit when no power is connected to the fixture.
3. At last fixture, the DMX cable has to be terminated with a terminator to reduce signal errors. Solder a 120-ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.
4. Each lighting fixture needs to have an address set to receive the data sent by the controller. The address number is between 0-511 (usually 0 & 1 are equal to 1).
5. 3 pin XLR connectors are more popular than 5 pins XLR.
   3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)
   5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

## 7. Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

**A. The fixture does not work, no light and the fan does not work**

1. Check the connection of power and main fuse.
2. Measure the mains voltage on the main connector.

**B. Not responding to DMX controller**

1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.
2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the fixture or the previous one.
4. Try to use another DMX controller.
5. Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

**C. Some fixtures don't respond to the easy controller**

1. You may have a break in the DMX cabling. Check the LED for the response of the master/ slave mode signal.
2. Wrong DMX address in the fixture. Set the proper address.

**D. No response to the sound**

1. Make sure the fixture does not receive DMX signal.
2. Check microphone to see if it is good by tapping the microphone.

**E. One of the channels is not working well**

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.



## 8. Fixture Cleaning

The cleaning of internal must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the fixture's optics.

- Clean with soft cloth using normal glass cleaning fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

**EC - Declaration of Conformity**

We declare that our products (lighting equipments) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 89/336/EEC.

EN55014-2: 1997 A1: 2001, EN61000-4-2: 1995; EN61000-4-3: 2002;

EN61000-4-4: 1995; EN61000-4-5: 1995, EN61000-4-6: 1996,

EN61000-4-11: 1994.

&

**Harmonized Standard**

EN60598-1: 2000+ALL: 2000+A12: 2002

Safety of household and similar electrical appliances

Part 1: General requirements

**Innovation, Quality, Performance**